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ER 11-2-240

CECW-BE

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# ARMY PROGRAMS CIVIL WORKS ACTIVITIES - CONSTRUCTION (RCS CECW-B-13)

- 1. <u>Purpose</u>. This regulation furnishes guidance pertaining to program development and management for specifically authorized Civil Works projects under the Construction, General, appropriation title and for the construction function under the Flood Control, Mississippi River and Tributaries appropriation title.
- 2. Applicability. This regulation applies to all HQUSACE elements, major subordinate commands (MSC), districts, laboratories, and field operating activities (FOA) having Civil Works responsibilities.
- 3. References.
  - a. ER 5-7-1(FR)
  - b. ER 11-2-201
  - c. ER 37-2-10
  - d. ER 1105-2-100
  - e. ER 1110-1-1300
  - f. ER 1110-2-1302
  - g. ER 1165-2-131
- 4. Reports Control Symbols. RCS CECW-B-13 is assigned to the information required in this regulation and related engineer circulars pertaining to the submission of the annual program and budget request for Civil Works activities.
- 5. General Programming Guidance. Programming and budgetary support materials and documents must comply with Army Civil Works policy. A 10-year program, which includes the budget year (BY) and nine subsequent outyears (BY+1 thru BY+9), will be developed based on the President's current year (BY-1) budget. This assumes that the BY-1 budget for continuing work, other new work, and new starts will be enacted, that budget amounts will be appropriated, and that funds will be made available by 1 October of the BY-1. The emphasis in the 10-year program is on maintaining a continuity in the work flow once a new investment decision is made to construct a project. Development and maintenance of a realistic work flow and funding schedule is essential to the preparation of the 10-year program. Each project must be periodically reviewed and adjusted to reflect Administration and Congressional direction, the sponsor's financial capability, and actual progress.

### 6. Appropriations.

a. Construction, General. This appropriation title provides funds for the prosecution, including detailed engineering studies and plans and

This regulation supersedes ER 11-2-240, dated 1 November 1974, and rescinds ENG Form 2202, RCS DAEN-CWB-3, RCS DAEN-CWB-8, and RCS DAEN-CWB-16.

specifications, of navigation, flood damage reduction, hurricane and storm damage reduction, and related projects, including measures for restoration and protection of fish and wildlife habitat resources, as authorized by law. This regulation contains instructions applicable to new and continuing construction, reconstruction, major rehabilitation, dam safety assurance, and deficiency correction projects specifically funded by Congress. It does not cover the Continuing Authorities Program, Aquatic Plant Control, or other items budgeted on a national programmatic basis as "Remaining Items" which are also budgeted within the Construction, General, appropriation title.

- b. Flood Control, Mississippi River and Tributaries. The instructions contained herein for Construction, General, are also applicable to the corresponding construction category under this appropriation.
- c. Appropriation Structure. Each project is categorized by function and type of improvement to be provided or work to be performed. The Corps of Engineers, in its request for appropriation of funds for project construction, utilizes the appropriation structure as shown in Appendix A.
- d. Project Categorizations and Features. Projects are assigned a category, class, and subclass according to the type of project involved. Each project will also be broken down by feature and subfeature of work as appropriate. Appendix A contains a breakdown and definition descriptions of category, class, and subclass of projects. A breakdown of component features and subfeatures and descriptions can be found in ER 37-2-10.
- 7. <u>Budget Procedures</u>. HQUSACE annually furnishes the Office of the Assistant Secretary of the Army (Civil Works) (OASA(CW)), the Office of Management and Budget (OMB), and the Congress with sufficient information upon which to base decisions for budgeting and appropriating funds for construction projects and programs. Information is provided for each project and program for which funds are requested for the budget year. The budget request submitted to Congress for each project is developed during a process of review and adjustment by the Corps, OASA(CW), and OMB. It reflects the overall budgetary objectives of the Administration. There are three distinct submissions in the budget process Initial, OMB, and Congressional.
- a. Initial Submission. Instructions for development, preparation, and submission for the Corps of Engineers Civil Works Budget and the 10-year program for construction projects are set forth in the annual program and budget request Engineer Circular issued by CECW-B which reflects directives and criteria supplied by the OASA(CW) and OMB. The initial submission begins with the district commander who prepares justification data for each project for which he requests funds for the budget year. The district commander's program is reviewed by the MSC commander who in turn submits his recommended program to HQUSACE. HQUSACE and OASA(CW) concurrently review the programs submitted by the division commanders for compliance with the program and budget guidance and national consistency. A nationwide program is then jointly prepared and submitted to OMB.
- b. OMB and Congressional Submission. The Secretary of the Army submits the recommended nationwide program to OMB for review. After the Office of the President has reviewed and made decisions on OMB's recommendations, OMB provides instructions, referred to as the "passback" to the OASA(CW) and HQUSACE concerning what projects may be included in the President's Budget. CECW-B then supplies the budget "allowances" to the MSC and district commanders for preparation of the justification data for the Congressional submission. During the process of budget development, the time allowed at any given administrative level for review or revision of estimates is frequently

very short; therefore, it is imperative that submission dates be observed. While the initial submission requirements and dates are provided by the annual program and budget request Engineer Circular, requirements and submission dates for any OMB phase revisions and for the Congressional submission are furnished by CECW-B by separate action.

- c. Disclosure of Budgetary Information. The President's Budget, after presentation to Congress, contains the only releasable budgetary information. All other budgetary data developed or used during the budget development process is embargoed working data until the end of the fiscal year to which it is applicable and is not to be released outside the Department of the Army prior to that time. Instructions on policies and procedures for disclosing budgetary information and approved funding capabilities are contained in an OMB guidance circular and in capability submission guidance that is issued annually by CECW-B.
- 8. <u>Project Management Plan</u>. The baseline cost estimate and schedule are developed during the final stages of the feasibility study through the preparation and approval of the Project Management Plan (PMP). Changes to the project cost estimate will be approved using procedures contained in ERs 1110-1-1300, 1110-2-1302 and Appendix 2-B of ER 5-7-1(FR). Other changes to the Project Management Plan will be approved using procedures contained in Appendices 2-A and C of ER 5-7-1(FR).
- 9. <u>Project Cost Estimate</u>. The Project Cost Estimate provides basic cost information necessary for preparation of budget requests, and is the basis for the Detailed Project Cost Schedule (PB-2a) prepared for funding requirements and reporting on the disposition of funds made available. Appendix B provides detailed guidance for preparation of the Project Cost Estimate. The form included in Appendix B, or a locally prepared form may be used. This estimate was formerly prepared on the ENG Form 2202, which is hereby rescinded.
- a. Preparation and Submission. Upon completion of a feasibility report recommending Congressional authorization of a project, or a project modification, a Project Cost Estimate will be prepared by the district and submitted to the MSC commander within 90 calendar days of the Division Commander's Public Notice. A Project Cost Estimate will also be prepared by the district commander and submitted to the MSC commander concurrently with the applicable evaluation or reconnaissance report for major rehabilitation, dam safety assurance, reconstruction, deficiency correction and specifically budgeted Section 1135 and Section 204 projects. The Project Cost Estimate will then be updated at least annually by the district commander until the project is financially completed as long as it remains in the "active" category (for planning, engineering and design or construction). It will reflect changes to the approved project management plan and price levels, projected to the beginning of the next fiscal year (1 October), and include future inflation allowances through the construction period based on factors provided by OMB. Project Cost Estimates will be submitted to the MSC commander for approval not later than 1 May each year. All schedule, cost and cost sharing changes to a project management plan will be simultaneously reflected in a revised Project Cost Estimate. A final closeout Project Cost Estimate will be prepared upon project completion to reflect actual costs.
- b. Approval. The MSC's director of programs management will review and approve each Project Cost Estimate for the MSC commander, either annually or upon completion of the procedures contained in ER 5-7-1(FR), and its accompanying guidance, concerning schedule and cost change requests.

- c. Use of Project Cost Estimate. The Project Cost Estimate is the document which displays the current approved project cost estimate. The information is used to prepare subsequent programming documents that reference estimated costs.
- d. Deferred or Inactive Projects. There will be no regular annual updating of the Project Cost Estimate for "deferred" or "inactive" projects. The cost estimates for these projects will be the approved estimate in use at the time of reclassification from the "active" category. The effective date of this estimate should be clearly identified at any time when referring to project cost. When a project or a portion of a project is reclassified to the "active" category, an approved revised Project Cost Estimate will be prepared without waiting until the regular annual revision.

### 10. Detailed Project Schedule (PB-2a).

- a. Preparation and Content. The Detailed Project Schedule (PB-2a) is an automated construction schedule used for management and budgeting of a project. It is based on the approved project management plan and is used to develop the district's initial construction funding requirement for a project and is adjusted thereafter to reflect budget decisions, work allowances, work progress, and continuing funding requirements. General instructions for preparation of the PB-2a are contained in the Project and Resource Information System for Management (PRISM) Users Manual. PB-2a's for construction projects will be prepared by the district and MSC commanders based on the President's BY-1 budget and their assigned 10-year program ceiling amounts. The PB-2a presents the detailed breakdown of the project cost estimate as well as the detailed status of construction as of the end of the prior year (BY-2), the quarterly schedule of proposed activity for the current year (BY-1) and budget year (BY), the annual schedule for each of the nine subsequent years (BY+1 through BY+9), and the programmed and unprogrammed balances to complete.
- b. Submission. An individual PB-2a will be prepared for all projects recommended for funding in the construction program for the budget year. In addition, PB-2as for certain projects not recommended for funding in the budget submission must be provided, in accordance with guidance provided by HQUSACE. Dates for receipt of these data by CECW-B will be established by the annual program and budget request engineer circular or separate action. An individual PB-2a for projects recommended as new construction starts will be provided after a budgetary decision has been made by the Office of Management and Budget to support initiation of construction.

### 11. Justification Sheets.

- a. Preparation and Content. Individual justification sheets are prepared for each project in the BY construction program to ultimately be used as part of the budgetary submission to Congress. These sheets are prepared by district commanders as part of the initial budget recommendations submittal for candidate new construction starts and other new work, and as part of the Congressional budget submittal for projects budgeted for continuing construction. General instructions for preparation of the justification sheets, including content and format, are contained in the annual program and budget request engineer circular.
- b. Submission. Dates for submission of the justification sheets for the initial submission are established by CECW-B in the annual program and budget request engineer circular. Dates for the Congressional submission are established by CECW-B by separate action. The justification sheets will be prepared by the district commander and submitted to the MSC commander in

sufficient time to allow thorough review and approval by the MSC commander before submission to HQUSACE (CECW-B) .

- 12. <u>Project Status Maps</u>. A Project Status Map is prepared for each new and continuing construction project included in the Congressional budget submission. Specific preparation instructions for Project Status Maps are contained in Appendix C. Dates and quantities for submission of these maps to HQUSACE (CECW-B) are established annually by separate action.
- 13. Active, Deferred and Inactive Classifications. Uncompleted authorized projects are classified in three categories: active, deferred, or inactive. Definitions and procedures for these classifications for projects are contained in ER 1105-2-100. The instructions in this regulation aply only to those projects in the "active" category.

### 14. Program Execution.

- a. Funding, Work Allowances and Reprogramming. The appropriation by Congress, apportionment by OMB, issuance of work allowances by HQUSACE to Divisions/Districts, and any subsequent necessary adjustments for funds provided under the Construction, General appropriation title or for the construction function under the Flood Control, Mlssissippi River and Tributaries appropriation title are discussed in ER 11-2-201.
- b. Current Year Program and Activities Management. The proper scheduling and reporting of obligations and expenditures for each project is important in the overall management and execution of the Civil Works program. Specific guidance for preparation and reporting of Schedules of obligations and Expenditures (2101 Report) is contained in the PRISM Users Manual and separate guidance issued annually.

FOR THE COMMANDER:

Rouse Mil.

ROBERT H. GRIFFIN Colonel, Corps of Engineers Chief of Staff

### 3 Appendices

APP A - Project Category/Class/Subclass Codes and Definitions

APP B - Project Cost Estimate (PB-3)

APP C - Project Status Map

# Appendix A CATEGORY/CLASS/SUBCLASS STRUCTURE FOR CONSTRUCTION (Extracted from Appendix 20-I, ER 37-2-10)

This appendix contains tabulations of the category/class/subclass codes for only the construction activities covered within the scope of this regulation. A complete list of all the category/class/subclass codes for Construction, General may be found in Appendix 20-I of ER 37-2-10.

Description	Category	Class	Subclass
CONSTRUCTION, GENERAL Treasury Account #: 96X3122 Appropriation Code: 902 COEMIS Symbol: B			
Advance Engineering and Design $\underline{1}/$	1	0	0
Navigation Channels and Harbors Specifically Authorized Projects Locks and Dams	2 2	1 2	1 0
Mitigation of Shore Damages Attributable to Navigation Projects	2	2	O
Specifically Authorized Projects Dam Safety Assurance	2 2	3 4	1 0
Beach Erosion Control Specifically Authorized Projects Sacrificial Features only Structural and Sacrificial Features	4 4	1	1 2
Flood Control Local Protection Specifically Authorized Projects Reservoirs	5 5	1 2	1 0
Urban Stormwater Management Specifically Authorized Projects Dam Safety Assurance	5 5	3 4	1 0
Multiple Purpose Power Dam Safety Assurance	6 6	0 4	0
Project Modifications for Improvement of environment Specifically Funded Projects	7	2	1
Wetland and Other Aquatic Habitat Creation Specifically Funded	7	9	1

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Description	Category	Class	Subclass
Rehabilitation Major Rehabilitation			
Navigation Channels and Harbors	8	1	3
Locks and Dams	8	1	4
Flood Control Local Protection Projects Specifically Authorized by			
Congress	8	1	6
Reservoirs	8	1	7
Multiple Purpose Power Projects	8	1	8
INLAND WATERWAYS TRUST FUND (Transfer from treasury) Treasury Account #: 96-20X8861 Appropriation Code: 961 COEMIS Symbol: GP			
Construction	3	0	0
FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTAR Treasury Account #: 96X3112 Appropriation Code: 908 COEMIS Symbols: ER EV	IES		
Navigation (ER) Dam Safety Assurance	3	1 1	0 4
Flood Control (ER) Dam Safety Assurance	3	2 2	0 4
Major Rehabilitation (EV) Navigation Flood Control	8 8	1	2 5

<sup>1/</sup> Advance engineering and design is applicable only when Construction, General, funds are appropriated for that purpose. Otherwise, work will be performed as preconstruction engineering and design under General Investigations (96X3121).

#### CATEGORY/CLASS/SUBCLASS (CCS) DEFINITIONS

- 1. Advance Engineering and Design. While usually accomplished as Preconstruction Engineering and Design (PED) under the General Investigations appropriation (96X3121), this work may be performed under the Construction, General, appropriation if funds are appropriated for that purpose. Normally, this consists of the engineering (including soil borings and geotechnical data), design, and related work, including real estate planning, necessary to obtain a firm estimate of the project cost and to reasonably fix the important features and the site; and the preparation of detailed design studies, plans and specifications sufficient to initiate construction; and sufficient real estate studies to permit initiation of construction and to identify the real estate tracts to be acquired for public access and for the initial development of recreational facilities. Where boundary marking and monumentation can be economically accomplished in conjunction with real estate surveys which are necessary as a part of this preconstruction planning, and is otherwise desirable, such work may be included. The intent of this design and real estate effort will be both to ready the first construction contract for advertising and award and to insure that there will be no gap in later construction simply to allow design to catch up with construction progress. All Advance Engineering and Design (AE&D) funds will be accounted for as such until expended, regardless of when Construction funds become available. After regular construction funds are made available, residual AE&D funds will be used up for remaining planning, engineering and design before any Construction funds are used. AE&D funds cannot be used for project construction.
- 2. <u>Navigation Projects Channels and Harbors (Projects Specifically Authorized by Congress)</u>. Construction or improvement of harbors and access channels and improvement of natural watercourses or areas, in the interest of navigation, by deepening, widening and straightening, including land cuts, related incidental construction, and provision of protective works.
- 3. Navigation Projects Locks and Dams. Waterways developed by means of locks, dams, artificial channels, land cuts reservoirs, and related construction, which have navigation as their primary purpose and do not include power features, will be included in this CCS. Reservoir projects which provide for both navigation and flood control, but not for salable power, will be categorized on the basis of their primary purposes as either "Navigation Projects Locks and Dams" or "Flood Control Projects Reservoirs." Navigation projects in connection with which power facilities are constructed by outside interests will also be included in this CCS.
- 4. Navigation Projects Mitigation of Shore Damages Attributable to Navigation Projects (Projects Specifically Authorized by Congress). Construction of projects for the prevention or mitigation of shore damages attributable to Federal navigation works, that have been specifically authorized by Congress. Projects included here usually exceed the ceiling for projects authorized under Section 111 of the River and Harbor Act of 1968, as amended, and subsequently are specifically authorized by Congress.
- 5. Beach Erosion Control Projects (Projects Specifically Authorized by Congress). Construction, and periodic nourishment, but not maintenance, of works for the restoration and protection against erosion by waves and currents, and for beach improvement on the shores of the Atlantic and Pacific Oceans, the Gulf of Mexico, the Great Lakes, and water bodies connected therewith, owned by States, municipalities, or other political subdivisions.
- 6. Flood Control Projects Local Protection (Projects Specifically Authorized by Congress). Protection of specific areas against floods, by

construction of such works as levees, floodwalls, channel improvements, reservoirs, diversions, flood ways, bank protection, and drainage facilities, and to prevent or reduce the frequency of inundation, the evacuation and resettlement of people and facilities from flood areas to protected areas or to areas not subject to flooding, and major drainage.

- 7. Flood Control Projects Reservoirs. Reservoir projects which have flood control as their primary purpose, but do not include power features, will be included in this CCS. Reservoir projects which provide for both navigation and flood control, but not for salable power, will be categorized on the basis of their primary purposes, as either "Navigation Projects Locks and Dams" or "Flood Control Projects Reservoirs."
- 8. Flood Control Projects Urban Stormwater Management (Projects Specifically Authorized by Congress). Projects which include urban water resources infrastructure, such as storm water storage or treatment facilities.
- 9. <u>Multiple-Purpose Power Projects</u>. All projects (including dams and reservoirs) which provide salable power will be considered as multiple-purpose projects and will be included in this CCS. Power system reregulating reservoirs, with or without power facilities, will be included. Where a continuous system of structures have power facilities, the entire system will be included in this CCS. However, those projects which are operated for the purpose other than power production, but which produce only incidental power benefits, will not be categorized as "Multiple-Purpose Power Projects."
- 10. <u>Project Modifications for Improvement of the Environment (Projects Specifically Funded)</u>. Projects intended to determine the need for and carry out structural modifications to existing projects, consistent with authorized project purposes, for the purpose of improving the quality of the environment in the public interest, and which are specifically funded under the Construction, General appropriation.
- 11. Beneficial Uses of Dredged Material (Projects Specifically Funded). Projects for the protection, restoration, and creation of aquatic and ecologically related habitats, including wetlands, in connection with dredging for construction or maintenance of an authorized navigation project, and which are specifically funded under the Construction, General, appropriation. The cost of these projects is limited to costs which are in excess of those costs necessary to carry out the dredging for the authorized navigation project.
- 12. <u>Major Rehabilitation</u>. The major rehabilitation program consists of work included in one or both of two mutually exclusive categories: reliability and efficiency improvements. The threshold amounts for each category are adjusted annually in the annual program and budget request engineer circular.
- 13. <u>Dam Safety Assurance</u>. The modification of completed Corps dams which are potential hydrologic or seismic safety hazards in light of present day engineering standards and knowledge. Included in this CCS is work to enlarge existing spillways to provide adequate discharge capacity, raise dam height to provide adequate freeboard allowance, and increase structural stability of embankment and foundation to withstand seismic loading.

### APPENDIX B PROJECT COST ESTIMATE

### General Instructions for Preparation

1. <u>General</u>. The Project Cost Estimate presents the official cost estimate, as contained in the Project Management Plan, including the cost allocation and cost-sharing, in a form suitable for preparation of other budgetary documents. The estimate is shown at current price levels and inflated through the construction period in accordance with instructions and inflation factors contained in the annual program and budget request engineer circular issued by CECW-B. The Project Cost Estimate is used in the preparation other programming and budgeting documents. Separable elements will be shown individually and will be totaled and summarized as separate projects with a combined summary for all elements. Project Cost Estimates will be completed and approved upon issuance of the Division Commander's Public Notice on the feasibility report, and updated at least annually.

### 2. Costs Included.

- a. The costs of changes and modifications to the previously approved authorized project scope are included in the Project Cost Estimate only after these changes have been presented in design memoranda, letter reports or other technical documents and reviewed and approved by the appropriate authority.
- b. To serve as the basis for the schedules prepared for programming of funds requirements and reporting on the disposition of funds made available, the cost breakdown of the authorized project, as presented in the main body of the estimate, includes costs paid from Corps of Engineers (Civil Works) appropriations, Inland Waterways Trust Fund, Harbor Maintenance Trust Fund, non-Federal cash contributions (or the value of work in lieu thereof) required, under the project authorization, and non-Federal costs in fulfillment of local cooperation requirements under the project authorization other than cash contributions. It excludes costs to the U.S. Coast Guard or other Federal agencies for provision of associated project facilities and costs for work accomplished in conjunction with but not charged to the authorized project (such as betterments to relocations).
- c. Total "deferred construction costs" allowed in certain relocation agreements where above-normal maintenance is anticipated during a seasoning period following completion of the relocation will be included in the cost estimate, including those costs that would occur after project completion.
- d. At the end of the feature breakdown in the main body of the estimate, show "Total Cost" and insert thereafter "(CofE Funds Only)" or "(CofE Funds & Non-Fed. Costs)," as applicable. If other Federal costs are applicable for associated project facilities, such as U.S. Coast Guard, list those items next followed by "Total Federal and Required Non-Federal Costs."

3. <u>Summary of Estimated Costs (Cost-Sharing)</u>. Following the cost allocation, show the following summary with entries opposite each line item in the applicable columns or with "(None)" inserted immediately after any line item title for which no amount is applicable (no zero or dash entries). Cost-sharing criteria should be explained for each purpose under the justification column.

### SUMMARY OF ESTIMATED COSTS

Federal Cost

Corps of Engineers

(Breakdown by Project Purpose)

U.S. Coast Guard

(If any other Federal cost, add another line item therefor.)

Required Non-Federal Costs

Cash Contribution

(Breakdown by Project Purpose)

Future Reimbursement

(Breakdown by Project Purpose)

Lands and Damages

(Breakdown by Project Purpose)

Relocations

(Breakdown by Project Purpose)

Other Costs (Specify)

(Breakdown by Project Purpose)

Total Federal and Required Non-Federal Costs

4. <u>Columnar Instructions for Preparing Project Cost Estimate</u>. These columnar instructions are applicable to the breakdown of the Project Cost Estimate, with its associated justification of detailed changes. In Columns c through m, place in parentheses amounts opposite items subsidiary to features, to assist in totaling.

Column a - Item. With suitable indentation, indicate the project breakdown into its components, namely separately authorized modifications or physically separable units, if any: "permanent" features and subfeatures, in the prescribed sequence, as applicable. This breakdown may be to the level of individual contract or hired labor jobs. Estimated costs of project components include applicable distributive costs; accordingly, distributive costs are not shown as separate line items, either in total or under applicable project components. The estimated costs of line items in the project breakdown include the applicable portion of the costs of temporary construction facilities serving such items. However, where there are major construction facilities, such as temporary construction camp or townsite, they are individually identified and shown with their total costs under "Major Construction Facilities." Item breakdown for Project Cost Estimates should be identical to the Item breakdown on PB-2as.

### Note 1: Special Handling of Certain Navigation and Flood Control Projects.

For navigation projects involving separately authorized modifications, consider each separately authorized modification as a separate entity, and arrange as follows:

- a. Identify, including citation of the applicable authorization act and document number, each uncompleted modification on which work is currently underway in the Current Fiscal Year or programmed for the Budget Fiscal Year and show the detailed breakdown.
  - b. On the final page, show the following:
- (1) Identify, by authorization act, all "Fully Completed Modifications," and group their costs as a one-line entry, including "Planning, Engineering and Design" and "Supervision and Administration."
- (2) Identify, by authorization act and document number, each uncompleted modification not underway in the Current Fiscal Year or programmed for the Budget Fiscal Year and group their costs as a one-line entry, including "Planning, Engineering and Design" and "Supervision and Administration."
- (3) Some flood control and navigation projects, because of the nature of the work involved, consist of a number of separable physical units. For such projects, each separable unit will be considered as a separate entity under the project or separately authorized modification. Arrange such units as follows:
- (a) Identify, by name, each "Uncompleted Unit," and show detailed breakdown.
- (b) Identify, by name, all "Completed Units," and group their costs as a one-line entry, including "Planning, Engineering and Design," and "Supervision and Administration."

Certain projects, because of their magnitude, complexity, or other factors, cannot be arranged in accordance with the above instructions. In such cases, special instructions will be issued by HQUSACE.

Note 2: Presentation of Identified Features and Subfeatures. Identify, under any feature or subfeature, certain significant items as "identified features and subfeatures." For example, show "State Highway 500" under the subfeature "Relocations - Roads," or "A&B RR Bridge" under the subfeature "Relocations - Railroads;" "Mile 10.7 to 14.6" and "Mile 17.2 to 21.3" under the feature "Channels and Canals;" "North Levee" and "South Floodwall" under the feature "Levees and Floodwalls;" "Main Embankment," "Auxiliary Dikes," "Spillway," and "Outlet Works" under the feature "Dams." Minor identified features or subfeatures may be grouped and shown as single line items under applicable headings; e.g., "Adams County Roads" under the subfeature "Relocations - Roads." All completed identified features or subfeatures will be grouped and shown as single line items under applicable headings; e.g., "Completed: Pumping Plants A, B, and C" under the feature "Pumping Plants."

- <u>Column b Uninflated Estimates: Previous Estimate</u>. Enter for each line item the last approved cost estimate. Indicate the applicable effective date in the column heading.
- <u>Column c Change in Estimate: Price Level</u>. Enter the amount of change due to price level. Guidance for price level adjustments will be furnished annually by CECW-B. Indicate decrease by "-" prefix. Reflect Federal salary adjustments as price level changes for "Planning, Engineering and Design," "Supervision and Administration," or other hired labor items, as applicable. Do not further escalate contracts already awarded.
- <u>Column d Change in Estimate: Other</u>. Enter the amount of change due to reasons other than price level change. Indicate decrease by "-" prefix.
- <u>Column e Change in Estimate: Justification for Other</u>. Enter briefly the reasons for other than price level changes from the previous approved estimate, justifying the amounts in Column d. The explanation justifying revisions should refer to the appropriate document supporting such a cost or schedule change, and include approval or execution dates. Where the requisite information cannot be clearly stated in the space prescribed, additional lines or footnotes may be utilized.
- <u>Column f Change in Estimate: Total Change</u>. Enter the increase or decrease "-" of the "Current Cost Estimate" (column g) as against the "Previous Cost Estimate" (column b). Column f will represent the sum of columns c and d.
- <u>Column q Uninflated Estimates: Current Estimate</u>. Enter the estimated cost of each line item, projected to the effective date of the Project Cost Estimate. Column g represents the sum of columns b and f.
- <u>Column h Fully Funded Estimates: Current Inflation</u>. Enter the future inflation on the estimate in column g using the following methodology:
  - a. Do not further escalate contracts already awarded.
- b. Escalate contracts remaining to be awarded by the appropriate inflation factor in accordance with CECW-B guidance in the annual program and budget request engineer circular.
- c. Escalate land acquisition, in-house planning, engineering and design costs, in-house supervision and administration costs, and non-Federal costs in a similar manner as the escalation of contracts remaining to be awarded.
- <u>Column i Fully Funded Estimates: Current Approved Estimate</u>. Enter the current approved estimated cost of each line item representing the total of columns g and h.
- <u>Column j Fully Funded Estimates: Previous Estimate</u>. Enter for each line item the last approved inflated cost estimate. Indicate the applicable effective date in column heading.
- <u>Column k Fully Funded Estimates: Previous Inflation</u>. Enter for each line item the future inflation applied on previous estimate.
- <u>Column 1 Fully Funded Estimates: Baseline Estimate</u>. Enter the baseline estimated cost for each line item.

- 5. <u>Rounding of Estimates</u>. Total project cost, and the Federal and non-Federal share of that cost, on the Project Cost Estimate will be expressed in thousands of dollars. Total project costs of less than \$1 million will be rounded to the nearest thousand dollars, and those of \$1 million or more will be rounded to three significant figures.
- 6. <u>Hurricane and Storm Damage Reduction and Beach Erosion Control Projects</u>. For projects in these categories, a clear separation of costs should be provided for the initial placement between "design profile" and "advance nourishment." Features 30 and 31, as well as the actual construction features are to be separated. "Advance nourishment" and "future nourishment" should be broken down under nourishment. Federal and non-Federal costs should also be broken down between design profile, advance nourishment and future nourishment.
- 7. <u>Basis of Estimate</u>. Opposite this heading, complete one of the statements (a) through (e) below, or other, as applicable:
- a. Based on cost estimate in the amount of \$\_\_\_\_\_\_, dated (Month & Year), in feasibility report HD\_\_\_\_\_\_, \_\_\_\_\_ (Congress, dated \_\_\_\_\_\_, with price level projected to 1 October 19\_\_\_; (and indicate whether estimate has been adjusted by escalation to applicable price level index or by recomputation utilizing current unit prices).
- b. Based on cost estimate in the amount of \$\_\_\_\_\_\_, dated (Month & Year), in feasibility report HD\_\_\_\_\_\_, (Congress, dated \_\_\_\_\_\_, modified by consideration of revised quantities due to changed conditions observed during a supplemental survey made in (Month & Year), with price levels projected to 1 October 19\_\_\_; (and indicate whether estimate has been adjusted by escalation to applicable price level index or by recomputation utilizing current unit prices).
- c. Based on definite project studies completed, with details to be included in forthcoming General or Feature Design Memorandum No. \_\_\_\_\_, scheduled for submission to Division Commander on \_\_\_\_\_.
- d. Based on cost estimate dated (<u>Month & Year</u>), in General or Feature Design Memorandum No. \_\_\_\_\_, approved by (Approving Authority) on \_\_\_\_\_, with price levels projected to 1 October 19\_\_; (and indicate whether estimate has been adjusted by escalation to applicable price level index or by recomputation utilizing current prices).
- e. Based on detailed cost estimate, dated (Month & Year) submitted to (Higher Authority) in General Design Memorandum No. \_\_\_\_\_, (or in Feasibility Report, letter report, other report, or detailed estimate on file in District Office), modified by: (a) further detailed design presented in Design Memos Nos. \_\_\_\_, (b) other changed conditions; (c) receipt of bids; (d) changes in price levels to 1 October 19\_\_ on work not yet contracted for (indicate whether changed by applying applicable price level indices or by applying current unit prices); (e) change orders, overruns, underruns, or negotiated agreements on work completed or now under contract; (f) change in allowance for contingencies in cost of work yet to be performed; (g) change in components in accordance with Justification of Revision; (h) etc.
- 8. <u>Contingency Allowances</u>. Contingencies will be shown on one line of the Project Cost Estimate with the amount to be determined based on the uncertainty associated with the cost of individual items. As construction proceeds, decreased uncertainty in future costs should result in an appropriate reduction in contingencies.

- 9. <u>Justification of Price Level Adjustment</u>. Guidance for price level and future inflation adjustments will be furnished by CECW-B in the annual program and budget request engineer circular. A careful explanation is needed if the applied unit prices and other aspects of the last approved estimates are still found to be currently valid despite, for example, a general inflationary trend since that previous estimate was prepared.
- Comparison of Cost Estimates Submitted to Congress. For each project expected to require individual budget justification sheets, on a separate 8-1/2 X 11 inch sheet attached to the copy of the regular annual revision of the Project Cost Estimate under the heading "Comparison of Cost Estimates," show in tabular form the difference between the latest inflated estimate of costs submitted to Congress and the proposed inflated estimate. This statement constitutes a draft of the "Comparison of Cost Estimates" paragraph to be shown on the project justification sheets to be submitted to the Congress. All changes should be included. The latest estimate submitted to Congress may or may not correspond to the last estimate approved through the regular annual or other revision of the Project Cost Estimate as reflected in Column h or j or the new Project Cost Estimate. A project cost estimate is considered to have been presented to Congress when: (a) the estimate was furnished in connection with authorization hearings; (b) the estimate was printed in an authorization act; (c) the project was specifically included in the President's budget for planning or construction, with its cost estimate individually listed therein; (d) the cost estimate was shown in the project budget justification data submitted by the Corps to the Appropriations Committees; (e) the cost estimate was specifically presented in testimony before the House or Senate Appropriations Committee, or in special data submitted to either of these Committees and incorporated into the printed hearings (Note that broad lists such as our capability tabulations and our complete backlog of projects do not constitute as having been presented to Congress. This item is intended to cover specific budgeted or unbudgeted projects for which individual fact sheets or cost estimates are prepared in response to a specific project question and which are printed in the hearings records.); or (f) the cost estimate was printed in a report of either of the Appropriations Committees. A project cost estimate is not considered to have been presented to Congress merely if it was presented by local interests in oral or written testimony at Committee hearings or by their insertion of a letter from the Corps of Engineers, including such an estimate, into the record of the hearings. In a brief statement enclosed in parentheses, below the "Comparison of Cost Estimates" paragraph, carefully identify the latest estimate submitted to Congress by indicating the date and circumstances of the submission and the effective date of that estimate, e.g., "(The latest estimate submitted to Congress was in the FY 1997 budget justification data furnished the Appropriations Committees, based on October 1995 prices.)" If the printed budget and the budget justification data submitted to Congress in advance of the appropriations hearings are amended by the oral testimony of the Corps of Engineers, or by an insert for the record or other special data subsequently submitted by the Corps of Engineers and included in the printed hearings, utilize the latest of these submissions for the comparison of estimates, and indicate, in the parenthetical identification, the applicable page number of the printed hearings in which this latest submitted estimate appears, if known; e.g., "(The latest estimate submitted to Congress was in oral testimony to the House Appropriations Committee in May 1996, based on February 1996 prices, and shown on page 1147 of the printed hearings.)" A sample paragraph might read as follows:

COMPARISON OF COST ESTIMATES: Enter a tabular explanation of the changes in the cost estimate from the last estimate presented to Congress to the current estimate, such as: The current cost estimate of \$xxx,xxx,xxx is an increase (decrease) of \$xx,xxx,xxx from the latest estimate (\$xxx,xxx,xxx) presented to Congress (FY 19xx). This change includes the following items:

Item	Total	Federal 1	Non-Federal
Price Escalation on Construction Features			\$x,xxx,xxx
Design Changes	x,xxx,xxx	1/x,xxx,xxx	x, xxx, xxx
Additional Functions Added under General Authority	x,xxx,xxx	<u>2</u> / x,xxx,xxx	x,xxx,xxx
Authorized Modifications	x,xxx,xxx	3/x,xxx,xxx	x, xxx, xxx
Post Contract Award and Other Estimating (Including Contingency) Adjustments	x,xxx,xxx	4/x,xxx,xxx	x,xxx,xxx
Schedule Changes	x,xxx,xxx	5/x,xxx,xxx	x, xxx, xxx
Price Escalation on Real Estate	x,xxx,xxx	x,xxx,xxx	x,xxx,xxx
Total	\$x,xxx,xxx	\$x,xxx,xxx	\$x,xxx,xxx

Footnotes should be utilized to explain changes.

Following are the definitions for the cost growth categories:

- a. <u>Price escalation (Construction features)</u>. The increase in project cost due to higher price levels reflecting higher energy, materials and labor costs. Escalation of real estate costs should not be included in this category. Price level increases for all other features including planning, engineering and design, and supervision and administration are included in this category. In general, all uncommitted work should be included in applying the price level index. No decreases are appropriate here, except when future inflation factors decrease from one submission to the next.
- b. <u>Design changes</u>. Any significant design changes to the project such as: shift of a dam to a different site location; changes in channel alignment and dimensions; change in type of dam; redesign of outlet works to provide for such things as temperature control; or increased elevation of levees based on revised flow line due to recent floods; or adding or extending a jetty, training wall or breakwater due to more detailed data. This includes associated planning, engineering and design, and supervision and administration. All cost changes resulting from approval of a design document should be included in this category unless the change was based upon additions based upon general authority or an authorized modification.
- c. Additional functions added under general authority. Includes purposes authorized by general legislation, such as water supply, recreation, water quality, historic preservation, and mitigation of cultural resources, including associated planning, engineering and design, and supervision and administration.
- d. <u>Authorized modifications</u>. These modifications are additions or deletions to the project including associated planning, engineering and design, and supervision and administration, authorized by specific legislation subsequent to the original project authorization, or major modifications made under the discretionary authority of the Chief of Engineers.

- e. <u>Post contract award and other estimating adjustments</u>. This includes all adjustments due to contract awards, contract overruns/underruns, changes in quantity estimates, and changes in unit prices that are not attributed to changes in price level indices. Lower unit prices based on recent good bid experiences should be included here and may offset increases taken on uncommitted work under price escalation. Include changes in contingencies here, as well as changes based on an analysis of costs to date and remaining work to be accomplished; e.g., lands and damages, planning, engineering and design, and supervision and administration.
- f. <u>Schedule changes</u>. These are direct costs to the Corps which result from delays due to budgetary constraints, litigation or action by the local sponsor. Price escalation cost increases resulting from schedule changes will be included in category a, above. However, those changes resulting from extended staffing at construction sites would be included here.
- g. <u>Sundry</u>. This includes changes which do not fall within the above categories, such as those associated with the environment, relocation assistance, and Federal and state legislation and regulations (e.g., water pollution control, GSA requirements, etc.).
- h. <u>Price escalation (Real estate)</u>. This item should include any change in cost due solely to changes in real estate appraisal value. Other real estate cost increases due to b through g above should be assigned to those categories.

If the price level of the latest estimate submitted to Congress is other than the beginning of the Past Fiscal Year, indicate the price level month and year, within the parentheses and immediately after the cost estimate figure. Where applicable, the comparison paragraph should state simply: "No change from the latest estimate submitted to Congress."

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PROJECT COST ESTIMATE	PROJECT NAME:					UNINFLATED ESTIMATES	GE IN ESTIMATE	IER FOR "OTHER"												
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# APPENDIX C PROJECT STATUS MAP (RCS CECW-B-13)

- 1. A Project Status Map is prepared for each project included in the Budget Fiscal Year Submission to Congress for new and continuing construction projects, and accompanies the justification sheets.
- 2. The Project Status Map is intended to show clearly all localities and features noted in the accompanying Justification Sheets and PB-2a, and to indicate the work completed and remaining to be accomplished. Do not clutter the map with unnecessary details not pertinent to the project. The map is to be printed on medium or heavy grade paper, in black only. Maps will not be prepunched. Two high quality reproducible copies of each map will be submitted. One copy will be placed behind the justification sheets for that project prior to printing, and once copy will be retained in CECW-B. If the construction justification sheets are prepared by the MSC or district as a package ready for printing, each map will be provided with a page number in sequence with the page numbers for the preceding justification sheets for the project. If the construction justification sheets are assembled as a package ready for printing by CECW-B, the page number will be added to the map by that office.
- a. Size. The map must be printed on paper that is 8 1/2 by 11 inches overall, including a 3/4 inch margin along the 11-inch top edge, to permit binding so that the maps face the front of the book. The map cannot be printed on larger size paper and folded.
- b. Reverse Side. Nothing may be printed on the reverse side of the map. Information formerly printed on the reverse side, including the project name, division, and district is no longer necessary.
- c. Title Block. In the lower right corner of the map, place the title block, including the project name, District and Division, and nominal date of preparation for each submission, namely, 1 January 19\_\_.
- d. Vicinity Map. In the upper right corner of the sheet, or in some other position only when the project map layout so requires, insert a small-scale vicinity map, clearly locating the project with respect to main geographical features. If at all practicable, the vicinity map should at least show a substantial portion of the state in which the project is physically located, and a sufficient portion of adjacent states to more clearly locate the project geographically. Do not overburden the vicinity map with unnecessary details.
- e. Orientation. Whenever feasible, orient the project and vicinity map with north to the top, and place the orientation arrow in a convenient position on the map. Where this standard orientation is unfeasible, orient the maps with north to the left. All printing on the map is to read in the same direction as that on the Justification Sheets when the 11-inch top edge of the map is aligned with the top of the Justification Sheets.
- f. Graphic Scales and Special Dimensioning. Show separate graphic scales for the project and vicinity maps. Where necessary to clearly show the extent of proposed operations, portions of the project map may be set out with exaggerated dimensions. Where the map size precludes the clear presentation of the various portions of the project, inclose a brief description of the work in a rectangular box, bordered with a solid or cross-hatched margin to indicated status, and arrowed to its proper location on the project map.

Where practicable and desirable, indicate particularly significant dimensions, capacities, or characteristics of major project facilities. Where sections of a waterway are of different dimensions, indicate the length of each section in miles, or in feet if less than one mile long. Indicate waterway widths in feet. Where work can be effectively illustrated by means of a cross-sectional view, this method should be used. Show both the present and authorized project dimensions for budgeted navigation improvements.

- g. Legend. The legend for the project map will use appropriately distinguishable cross-hatching to display the following information:
  - Work completed.
  - Work underway with funds available for the Current Fiscal Year.
  - Work proposed with funds requested for the Budget Fiscal Year.
  - Work required to complete the project after the Budget Fiscal Year.

Do not show allocations of funds to various items of work. Shade shoreline to distinguish between land and water areas. For projects with reservoirs, indicate the real estate taking line or, if this is not available, the boundary of the flood control pool. Also indicate the status of land acquisition by cross-hatching the reservoir area in accordance with the legend noted above. For local protection projects, show the flood line and date of flood of record. For projects with separately authorized modifications, distinguish between the work under the modifications being budgeted and the other modifications; under the "Legend," show about half of each applicable block cross-hatched differentially, and insert, below the last block, "Lighter hatching indicates modifications not included in current budget request."

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